

UN# 13H - midpoint application review

#5) Goal: ~~find the~~ The goal is to find the coordinates of the point that is $\frac{1}{4}$ of the way from (2,4)

Required:

- Endpoints (2,4) and (10,8).

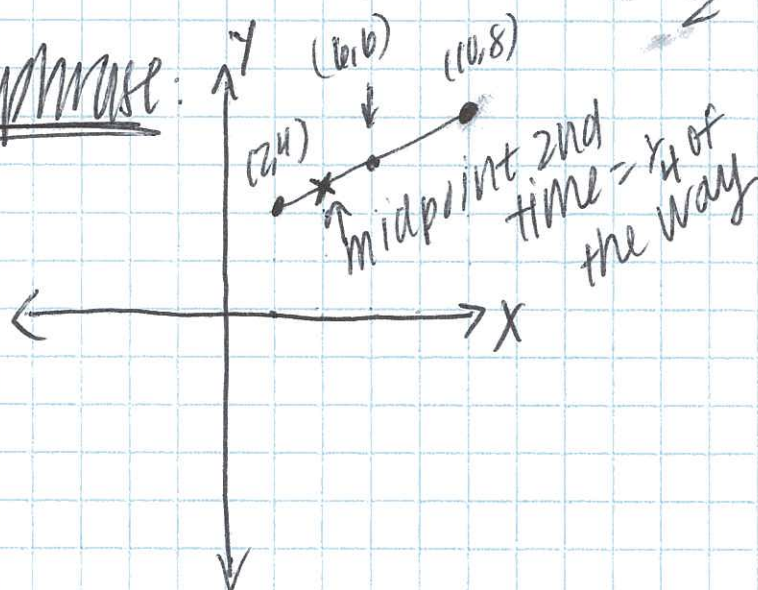
- Midpoint formula: $\frac{x_1 + x_2}{2} = x_m$ $\frac{y_1 + y_2}{2} = y_m$

Analysis: I will use the midpoint formula twice. once to find the midpoint of (2,4) and (10,8) and a 2nd time to find midpoint of (2,4) and the midpoint I found.

Solve: $\frac{2+10}{2} = \frac{12}{2} = 6$ $\frac{4+8}{2} = \frac{12}{2} = 6$ (6,6)

$$(2,4) (6,6) \rightarrow \left(\frac{2+6}{2}, \frac{4+6}{2} \right) \rightarrow (4,5)$$

Paraphrase:



✓: since I graphed all of my points I can see that my point (4,5) is $\frac{1}{4}$ of the way from the first point.


#3
on
back:

(x, y, z)

$x = \text{latitude}$
 $y = \text{longitude}$
 $z = \text{time}$

$$\left(\frac{24.3 + 41.5}{2}, \frac{118.11 + 87.37}{2}, \frac{0 + 42}{2} \right)$$

$$(27.9, 102.74, 21)$$

Extra credit! shhh! If you are reading this,
draw a cat on your test tomorrow to receive
extra credit! 

Do Not tell anyone! keep it a secret!